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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,599	05/09/2000	HIRONOBU MIZUNO	0050-1659-2-	6735

7590 12/07/2004

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EXAMINER

EDUN, MOHAMMAD N

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/530,599	MIZUNO ET AL.
Examiner	Art Unit	
	MUHAMMAD N EDUN	2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 09 May 2000.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-65 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,4 and 7 is/are rejected.

7)  Claim(s) 2,3,5,6 and 8-65 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Takashi et al. (EP 0 847 049).**

Takashi et al. discloses the invention as claimed. Figs. 1-18 show the optical information recording medium for recording information having the plurality of record mark lengths, wherein the shortest mark length is at most 0.5um (believed to be no smaller than the focused beam which is described in page 9, line 30, to be between 10-100um), and a crystal state is an unrecorded or erased state and an amorphous state is a record state (see the abstract), and wherein erasing of information is made by recrystallization which substantially proceeds by crystal growth from a boundary between a peripheral crystal portion and an amorphous portion or melt portion (see page 11, lines 44-58), as set forth the claims. Further the reference teaches that the recording medium is irradiated and recorded at constant linear velocity, as set forth in claim 4, (see page 8, lines 1-26); and the thickness of the recording layer is for example 15nm, which is within the recited 5nm to 25nm range (see page 6, lines 28-35), and the

main components are made of the same materials as the reference (see page 6, lines 45-58), as set forth in claim 7. See the description of the figures for further details relating to the limitations as set forth in the claim.

***Allowable Subject Matter***

**Claims 2, 3, 5, 6 and 8-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**The following is a statement of reasons for the indication of allowable subject matter:**

The prior art of record alone or in combination does not teach or suggest the optical information recording medium of claims 1, 4 and 7 having the further limitations as set forth in claims 2, 3, 5, 6 and 8-65, and as disclosed in the specification.

***Conclusion***

**The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

Horie et al. (6,128,273), Ono et al. (5,303,440) and Nakakima et al. (5,541,909), all disclose an optical disk apparatus having a phase change optical disk capable of being recorded by crystalline, amorphous or recrystalline for providing unrecorded, recorded or erased states.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUHAMMAD N EDUN whose telephone number is 703-308-1550. The examiner can normally be reached on FLEXITIME.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DORIS TO can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MUHAMMAD N EDUN**  
**Primary Examiner**  
**Art Unit 2655**